

Small Shop's CNC Router "Like Having a Free Employee"

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Until recently, Tom Farmer worked for a large corporation. He spent his evenings, weekends, and days off doing what he loved to do - making high-end custom kitchens. His customers loved the solid surface counters and hardwood cabinets he produced. The word spread around the Rochester, N Y, area and soon Farmer had more business than he could handle for his small shop, Upstate CNC Service.

But the question arose: How could he get all that work done? Farmer would clamp the template to the solid surface material and run a hand router around the edges, then fasten the counter in place and cut it to the final shape. It typically took two to three days to fabricate and install the countertop, and the best accuracy that could be achieved with this hand-cutting method was about 1/16 inch.

A New Breed of CNC Machine

Farmer was aware that CNC machinery could automatically produce the complicated shapes needed for countertops in custom kitchens, however, the size of the countertops he built would have required a very large machine costing anywhere from \$50,000 to more than \$100,000. With his business still in the early stage of development, Farmer could not even consider spending that much money on equipment.

Then Farmer heard about the Techno LC Series CNC routing system, which provides a number of critical features that allow it to deliver accuracy to a level that has previously only been available from machines at a much higher cost.

Ball screws are provided on all three axes, offering smooth motion, a high level of accuracy and repeatability, and minimal maintenance. A closed loop servo control system provides constant position feedback, higher power and smooth continuous motion that eliminates the

possibility of losing position in the middle of a part. The LC series includes an aluminum T-slot table that can be converted to a vacuum table by installing the Techno accessory kit.

"The Techno LC machine clearly had the capabilities I needed to substantially reduce the time required to produce countertops," Farmer said. "I talked to the people at Techno, explained my situation, and hoped they would make me an offer that I couldn't refuse. They offered me an LC4896 with a 4-foot by 8-foot table and all the software needed to design and build



For Farmer the Techno machine makes it possible to fabricate a countertop from start to finish in only one day, less than half the time that was required in the past.

any wood or solid surface component up to that size for only \$18,500. I bought the machine and have never regretted my decision."

Substantial Time Savings

After purchasing the Techno CNC router, Farmer changed his method of fabricating the counters. Now, he lays out the geometry of the entire kitchen using BobCAD software, generates a toolpath to produce the design, then exports the G-Code to the Techno machine. He then mounts the countertop onto the CNC router, selects the program, turns on the machine and lets it

rip. The Techno LC has an accuracy of ± 0.002 inch.

"The Techno machine makes it possible to fabricate a countertop from start to finish in only one day, less than half the time that was required in the past," Farmer said. "Even better, I can spend the majority of that time working on other projects while the CNC router completes the countertop. It's like having a free employee here that does the job right every time. I save additional time when I install the countertops because I know they will fit perfectly."

In addition to the time savings in countertop production, Farmer also achieves greater accuracy in manufacturing wood cabinets. While he still produces simple cabinet components on dedicated manual machines, the CNC router is often used to produce more complex parts, as well as produce designs that would be impossible or impractical to make by hand. An example of this is a curved cabinet whose door, box, frame face, stiles and rails are all curved.

"On the average, the CNC router has reduced by about 20%, the time required to make cabinets and other wooden parts of a custom kitchen," Farmer said.

"The Techno machine helped me triple the revenues of my business, Upstate CNC Service, making it possible for me to quit my day job and spend every day doing what I love," Farmer added. "The CNC router produces even better looking countertops and cabinets than I was able to produce in the past. Yet I can fabricate and install the countertops in a fraction of the time that was previously required. I also save a significant amount of time in producing wooden cabinetry. And I have the option of producing far more intricate designs than were possible in the past."

"All in all, the Techno LC machine has played a vital role in making it possible for me to do what I love every day."

For more information about Upstate CNC Service, visit www.upstatecnc.com